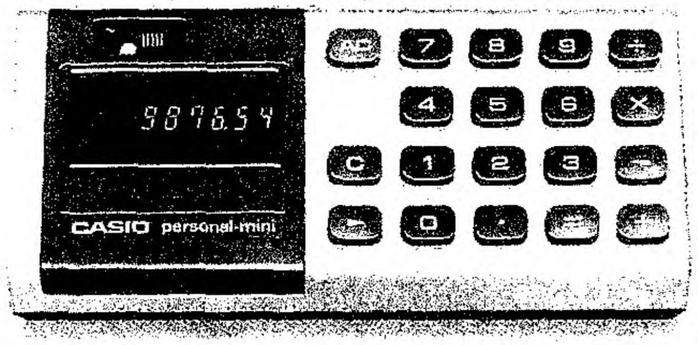
CARE OF YOUR NEW ELECTRONIC CALCULATOR

The calculator is a durable, precision-made instrument which will provide you with years of trouble-free service.
To help ensure this we recommend that the inside of the calculator not be touched. It is also inadvisable to subject the calculator to hard knocks, drops, and unduly strong key pressing.
Extreme cold (below 0°C or 32°F), heat (above 40°C or 104°F) and humidity may also effect the function of the calculator. When you do not use the calculator for a long period, take out the batteries to prevent damage if the batteries leak. Please make sure you switch off the power when you finish your calculations or intend to open the cover to change batteries.
Should the calculator need service, take the unit to the store where purchased or to a nearby dealer.

ELECTRONIC CALCULATOR

CASIO personal-mini

OPERATOR'S INSTRUCTION MANUAL



Casio®
※ Printed in Japan

INTRODUCTION

Dear customer,

Congratulations on your purchase of this new pocket-sized personal electronic calculator.
To operate this compact yet feature-packed calculator — 6-digit capacity for entry and 12-digit products from a double length display system, automatic floating decimal point system, constants for all four functions, square/power and reciprocal calculation capability, zero suppression and AC/DC power source choice — no special training is required but we suggest you to take a few minutes to become familiar with this instruction manual.
It has been written to assist you in understanding the various control keys and functions of the calculator through simple examples and their applications.

DISPOSABLE DRY BATTERY OR AC OPERATION

This calculator operates on either dry batteries or AC with the use of the AC ADAPTOR.

DRY BATTERY OPERATION
With two Manganese dry batteries (UM-3 or SUM-3) it operates for approximately 10 hours continuously.
Even when battery power decreases, the display will merely darken but cause no miscalculation. When you have finished your calculation, be sure to switch off the power switch to save battery power.
To change batteries, put the power switch off first. Slide open the battery cover and replace batteries.

AC OPERATION
If you are in a 117V area, for instance, use a 117V AC ADAPTOR. When you use an AC ADAPTOR of a different voltage, it may cause damage to both the AC ADAPTOR and calculator.
Plug the applicable AC ADAPTOR (100, 117, 220 or 240V) into the AC outlet and the cord into the calculator. When plugged in, battery power supply stops automatically, so battery power is not wasted.

KEYBOARD

ON-OFF SWITCH

To switch on, move the left-hand switch to the right; "0." is displayed in the read-out and you can start operation immediately without depressing the AC or C key.

READ-OUT

6-digit capacity Digitron tube panel brightly displays each entry, each result whether final or intermediate and unnecessary 0's (zeroes) are suppressed.

NUMERAL and DECIMAL POINT KEY 0—9 · ·

Enters numerals to the read-out. If the number includes a decimal point, use the · key in its logical sequence.
For example, to enter the number 12.36, depress 1 2 · 3 6.
When decimal places are involved, a full floating decimal point system with whole number preference (underflow) is applied automatically in all calculations.

FUNCTION COMMAND and RESULT KEY + · − · × · ÷ · =

Commands the functions (+ , − , × or ÷). Depress the appropriate function keys as they appear in the written problem and the answer is obtained by depressing the = key.

CLEAR KEY C

Clears keyboard entry for correction. When depressed immediately after any of the command keys (+ , − , × or ÷), it does not function.

ALL CLEAR KEY AC

Clears the entire machine and releases the overflow check.

FULL REGISTER VIEWING KEY ▶

In all calculations, the significant digits of an answer are displayed by depressing the = key and the subsequent digits, if any, are shown while depressing the ▶ key. (Double length display system.)
Releasing the ▶ key always re-displays the significant digits.
Depress the AC key before going on to the next calculation, if the whole number digits of an answer exceed six.

BASIC OPERATIONAL EXAMPLES

Press the keys in exactly the same sequence as they appear in the problems. There is no need to depress the CE or C key prior to starting each new calculation, as an automatic clearing is given by the new entry when you have finished the previous calculation by depressing the = key.

EXAMPLE	OPERATION	READ-OUT	
456	4 5 6 =	456.	
−789	7 8 9 +	− 333.	(Answer of 456 − 789)
753	7 5 3 =	420.	(Final result)
420			
1.23x4.5x8	1 . 2 3 ×	1.23	
=44.28	4 . 5 ×	5.535	(Answer of 1.23 x 4.5)
	8 =	44.28	(Final result)
741.258x32.1456	7 4 1 . 2 5 8 ×	741.258	
=23828.1831648	3 2 . 1 4 5 6 =	23828.1	(Significant 6 digits of product)
(To obtain subsequent digits)	C	831648	(Subsequent 6 digits of product)
			Answer is read: 23828.1831648

* Product can be obtained up to 12 digits as in the above example.

1.59÷36=0.0441666...	1 . 5 9 ÷	1.59	
	3 6 =	0.04416	(Significant 6 digits of quotient)
(To obtain subsequent digits)	C	660000	(Subsequent digits of quotient)
			Answer is read: 0.0441666

* Quotient can be obtained up to 6 digits of figures other than 0(s) [zero(s)] on the left of the figure.

Any commands wrongly entered can be corrected by successive depression of the proper command key.
The last command made by either +, −, × or ÷ key is effective.

EXAMPLE	OPERATION	READ-OUT	
8−3=5	8	8.	
(Mistake)	+	8.	
(To correct)	−	8.	
	3 =	5.	

CALCULATION WITH A CONSTANT

During operation, the number entered immediately before the = key is automatically set as a constant in all four functions.
When a new operation is made, it clears the previous constant and sets the number entered in the same manner as a new constant automatically.

ENTRY × (+, − or ÷) ENTRY =
→ To be set as a constant.

PROBLEM	EXAMPLE	OPERATION	READ-OUT
CONSTANT ADDITION	3+1.2= 4.2	3 + 1 . 2 =	4.2
	6+1.2= 7.2	6 =	7.2
	9+1.2=10.2	9 =	10.2
CONSTANT SUBTRACTION	4 −5.6=−1.6	4 − 5 . 6 =	− 1.6
	12 −5.6= 6.4	1 2 =	6.4
	78.9−5.6= 73.3	7 8 . 9 =	73.3

EXAMPLE	OPERATION	READ-OUT	
(2.3÷4.56−8.9)x	2 . 3 ÷	2.3	
59÷53=−2.27094...	4 . 5 6 −	6.86	(Answer of 2.3 + 4.56)
	8 . 9 ×	− 2.04	(Answer of 6.86 − 8.9)
	5 9 =	−120.36	(Answer of −2.04 x 59)
	5 3 =	2.27094	(Significant 6 digits of final result)
(To obtain subsequent digits)	C	00000−	(Subsequent digits of final result and the minus sign)
			Final result is read: −2.27094

* The minus (−) sign appears on both the sixth column of the first display and first column of the second display. If the negative result, however, occupies the full 6 columns of the first display, the minus sign is shown only on the first column of the second display while depressing the C key.
* When a problem commences from a negative figure, operate CE = ENTRY in its sequence and the negative figure can be entered in all calculations.

CORRECTION

Use the C key to clear a wrongly entered number and re-enter the right number.

EXAMPLE	OPERATION	READ-OUT
11+22+32=65	1 1 +	11.
	2 2 +	33.
(Mistake)	3 4	34.
(To clear)	C	0.
	3 2 =	65.

PROBLEM	EXAMPLE	OPERATION	READ-OUT
CONSTANT MULTIPLICATION	9 x23=207	9 × 2 3 =	207.
	4.56x23=104.88	4 . 5 6 =	104.88
	1.2 x23= 27.6	1 . 2 =	27.6
CONSTANT DIVISION	41÷2.5=16.4	4 1 = 2 . 5 =	16.4
	52÷2.5=20.8	5 2 =	20.8
	63÷2.5=25.2	6 3 =	25.2
ADDITION/SUBTRACTION with REPEAT VALUES	7	7 +	7.
	+8	8 =	15.
	+8	=	23.
	−3	− 3 =	20.
	−3	=	17.
	17		

CHAIN OPERATION

In all four functions, chain operations can be performed using only the numbers shown in the first display, dropping off the decimal digits in the second display.
Please note that when an intermediate result is more than 6 digits, THE FINAL RESULT IS AN APPROXIMATE ANSWER.

EXAMPLE	OPERATION	READ-OUT	
963.874	9 6 3 . 8 7 4 ⊟	963.874	
− 22.2589	2 2 . 2 5 8 9 ⊞	941.615	(Significant 6 digits to be used in succeeding addition)
1596.32			
2537.935(1)	▷	100000	(Subsequent digits to be dropped off in succeeding addition)
	1 5 9 6 . 3 2 ⊟	2537.93	(Significant 6 digits of final result)
	▷	500000	(Subsequent digits of final result)

Final result is read: 2537.935

OVERFLOW CHECK

In all four functions, you can calculate until the whole number digits of the result exceed 6 and overflow takes place.
Overflow is signalled by the disappearance of the decimal point from the first display and stops further calculation.
The ▷ key shows the subsequent digits of the answer in the second display and the CE key releases the locked registers caused by the overflow check.

EXAMPLE	OPERATION	READ-OUT	
999.999	9 9 9 . 9 9 9 ×	999.999	
x 8888.88	8 8 8 8 . 8 8 ⊟	888887	(Significant digits of product. The decimal point disappears from the read-out.)
=8888871.11112			
	▷	1.11112	(Subsequent digits of product)
			Answer is read: 8888871.11112
(To start a new calculation)	CE	0.	

SQUARE AND POWER CALCULATION

EXAMPLE	OPERATION	READ-OUT
2.5^2= 6.25	2 . 5 × ⊟	6.25
2.5^3=15.625	⊟	15.625
2.5^4=39.0625	⊟	39.0625
2.5^2= 6.25	2 . 5 × ⊟	6.25
2.5^4=39.0625	× ⊟	39.0625

RECIPROCAL CALCULATION

EXAMPLE		OPERATION	READ-OUT
$\frac{1}{(2+3)\times 4.5}$		(2) + (3) ×	5.
=0.0444444		(4) ÷ (5) ⊟	22.5
		⊟	1.
		⊟	0.04444
		▷	440000
		2 + ⊟	1.
$\frac{1}{2^n}$ =	n=1	⊟	0.5
	n=2	⊟	0.25
	n=3	⊟	0.125
$\frac{9876}{123+456}$		1 2 3 +	123.
		4 5 6 ⊟	579.
=17.0569		⊟	1.
		9 8 7 6 ⊟	17.0569

PRACTICAL EXAMPLES

• PRO-RATING

Division	Sales amount	%
A	$12,000	31.25
B	9,600	25.00
C	16,800	43.75
Total	38,400	

OPERATION	READ-OUT	
1 2 0 0 0 +	12000.	
9 6 0 0 +	21600.	
1 6 8 0 0 ⊟	38400.	(Total)
1 0 0 % ⊟	1.	
1 2 0 0 0 ⊟	31.25	(% of Div. A)
9 6 0 0 ⊟	25.	(% of Div. B)
1 6 8 0 0 ⊟	43.75	(% of Div. C)

• *SALES INCREASE/DECREASE*

Formula: $\frac{\text{This month}}{\text{Last month}} - 1 = \text{Increase/decrease \%}$

Last month	$245,680
This month	325,526
Increase/decrease %	32.5%

OPERATION	READ-OUT
3 2 5 5 2 6 ⊟	325526.
2 4 5 8 6 0 ⊟	1.325
% ⊟	0.325

Answer is read: 32.5%

• INTEREST

Principal	$7,300
Interest rate (per annum)	0.075
Number of days	125
Interest	$187.50

OPERATION	READ-OUT
7 3 0 0 ×	7300.
. 0 7 5 ×	547.5
1 2 5 ⊟	68437.5
3 6 5 ⊟	187.5

Answer is read: $187.50

SPECIFICATIONS

OPERATIONS:
Addition, subtraction, single/chain multiplication, single/chain division, addition/subtraction with repeat values, constant calculation in four functions, square and power calculations, reciprocal calculation, mixed calculation, true credit balance and calculation involving decimal places.

CAPACITY:
Entry/display . . . . . 6 digits
Addition/subtraction . . . . . 6 digits +(−) 6 digits = 11 digits max.
(whole number: 7 digits max.)
Multiplication . . . . . 6 digits x 6 digits = 12 digits max.
Division . . . . . 6 digits ÷ 6 digits = 6 digits (Significant figures)

DECIMAL POINT: Automatic floating decimal point system.

NEGATIVE NUMBER: Indicated by minus (−) sign.

OVERFLOW CHECK: Indicated by disappearance of the decimal point from the first display, locking calculator.

READ-OUT: Green Digitron tube panel.
Unnecessary 0's (zeroes) are suppressed.

MAIN COMPONENT: One chip LSI

POWER CONSUMPTION: 0.18W

POWER SOURCE:
AC 100, 117, 220 or 240V (±10V), 50/60Hz, with applicable AC ADAPTOR.
DC UM-3 or SUM-3 (Manganese dry battery) x 2 (pieces).
Continuous operation: Approx. 10 hours.
AM-3 (Alkaline dry battery) x 2 (pieces).
Continuous operation: Approx. 22 hours.

USABLE TEMPERATURE: 0° ~ 40°C (32° ~ 104°F)

DIMENSIONS: 25.5mmH x 143mmW x 69mmD (1"H x 5-3/4"W x 2-5/8"D)

WEIGHT: 166g (6oz) including batteries.